

Learning Portal Lite: Medicines and children

This is a one-page summary; see the [full version online](#)

Questions about medicines in children can present more of a challenge than questions about adult therapy because of the general lack of evidence in this age group, particularly with respect to finding suitable formulations and establishing safe, but effective doses.

Dosing

This is a common question and usually straightforward if the medicine is licensed for the right indication and age group. However many questions will relate to unlicensed or 'off-label' use. If your first line information sources are not helpful (BNF-C etc.) then you may need to undertake a literature search or contact local or national experts (e.g. GOSH, Alder Hey, NPPG forum). Don't forget to consider how the dose will be given practically.

Administration

Some children will be able to take tablets but many will require a liquid formulation. If a licensed liquid is not available then you may need to consider a different route or drug, sourcing a UK 'special', importing a licensed liquid from outside the UK, or maybe dissolving or dispersing a tablet. Extemporaneous preparation is less preferred.

Medication choice

Besides the normal factors you should consider when choosing a medicine for any patient, there are some extra considerations for children. Some excipients may pose special problems (e.g. glucose, ethanol). Other medicines may cause side effects specifically in children (e.g. chloramphenicol causing 'grey baby' syndrome in neonates).

Reducing risk

Medication errors are more common in infants and children. Common reasons include complex calculations and dilutions and the need to use adult formulations.

Legal considerations

If you are asked about the choice of drug in a child, consider if there is an appropriate, licensed drug first. If you can't use a licensed medicine, you should take extra steps to ensure that the use of the medicine is justified in terms of evidence, necessity, and safety.

Questions to ask

You might need to ask about the child's age and weight, for neonates and young infants whether they were premature, and their relevant medical and drug history.

Information sources

Try the BNF-C, SmPC, Evelina Formulary, Medicines for Children, Neonatal Formulary, Martindale, Lexicomp, Micromedex, Embase, Medline, local then national experts.

